

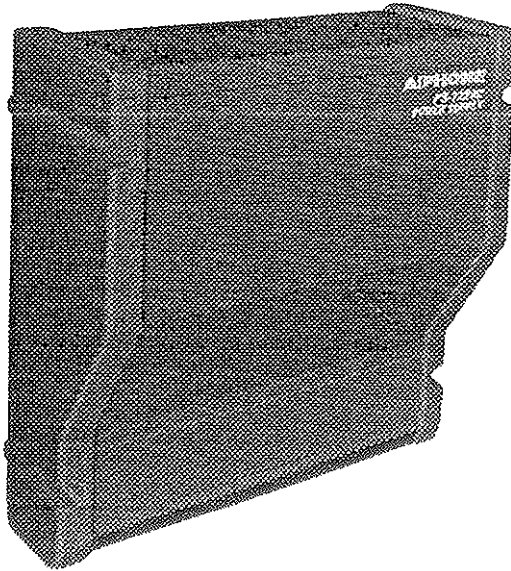
# POWER SUPPLY

## PS-1224C

- INSTRUCTIONS -

The PS-1224C power supply is designed for exclusive use with Aiphone intercom and paging systems.

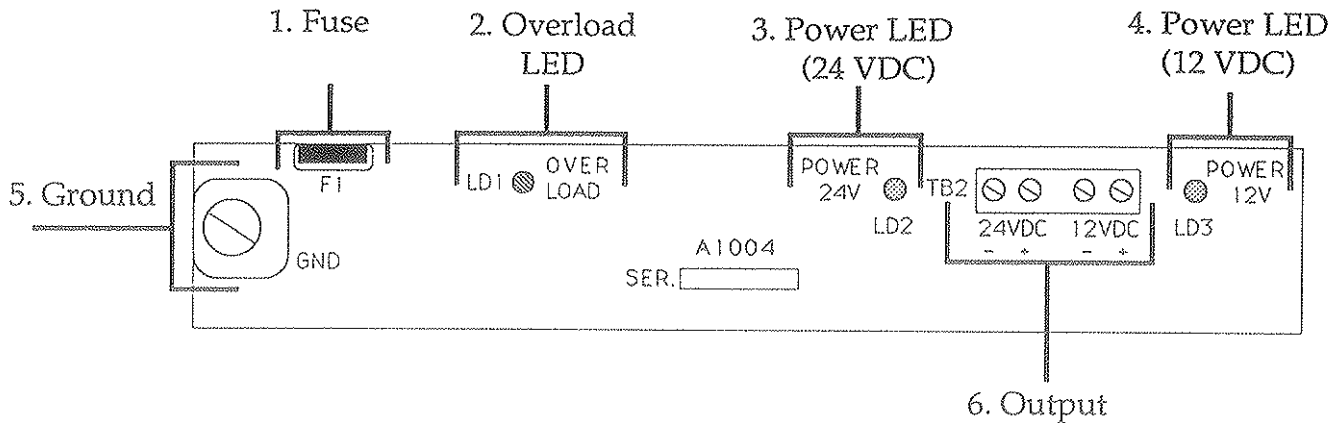
### 1 PRODUCT FEATURES



- Solid state voltage regulation and overload protection.
- Dual output voltage.
- LED indicators for voltage output and overload.
- Black anodized brushed aluminum finish with black ABS end panels.
- Wall mounting.
- Matches appearance of Aiphone's PG-C series amplifiers and PGT-8 AM/FM Tuner.
- Designed for use with amplifier (PG-nC), tuner (PGT-8) and Aiphone intercom systems.
- UL & CSA listed.

## 2 NAMES AND FUNCTIONS

The following controls and terminals may be accessed by removing the screw on the bottom of the unit and lifting the lower cover.



### 1. FUSE

Replace fuse with 3AG SloBlo's rated at 1.25 Amps.

### 2. OVERLOAD LED

Provides indication that the output load is heavier than the PS-1224C capacity.

### 3. POWER LED - (24 VDC)

Provides indication that 24 VDC is available.

### 4. POWER LED - (12 VDC)

Provides indication that 12 VDC is available.

### 5. GROUND

A chassis ground has been provided to allow separate grounding of the unit, if required.

### 6. OUTPUT

Output voltage is available in the following ratings:

Single Output:

12 VDC: 2 A Max. (Continuous)

24 VDC: 1.4 A Max. (Continuous)

Dual Output:

12 and 24 VDC simultaneously: 1 A Max. each (Continuous)

# 2

## NAMES AND FUNCTIONS - CONT.

### 5. PRESET CONTROLS

#### A) VOX - P9 (Voice activated switch)

This pot adjusts the sensitivity of the VOX threshold of the tel/mic input. Make adjustments as follows:

- 1) Set the VOX control fully counter clockwise (CCW) (background music should be on).
- 2) While someone is talking in the page mode, slowly turn the control clockwise (CW) until the VOX circuit triggers and the background music cuts off.
- 3) Turn the control an additional 1/8 turn CW and leave at this setting.

If the VOX function has a tendency to drop out, slightly increase (CW) the control setting.

#### B) Noise - P10 (Talkback background noise balance)

This pot cancels the background noise in the talkback circuit which may be induced into the speaker wiring by an outside source. (For use with the PD-2 talkback paging adaptor only.)

#### C) Level - P11

This pot sets the talkback level of the amplifier. (For use with the PD-2 talkback paging adaptor only.)

### 6. GROUND TERMINAL

A chassis ground has been provided to allow separate grounding of the unit, if required.

### 7. OUTPUT

Connect speaker wires to the terminals labelled OUTPUT. The rated output of all amplifiers is 70V RMS.

**Note:** To prevent any possible oscillation ensure that the speaker wires are kept away from any input wiring connected to the terminal strip described below (Item 9).

### 8. CN-1

CN-1 is provided on the amplifier to allow easy direct plug-in of the matching AM/FM tuner (PGT-8), via a ribbon cable included with the tuner.

### 9. TERMINALS 1-9

In accordance with your particular system installation and requirements, make the following connections at the terminal block at the right.

#### A) Terminals 1 & 2 - Tel/Mic (Balanced Input)

Connect to either the telephone system page port, C.O. port, a telephone set or an external microphone (600Ω balanced - shield to pin 3) to these terminals. Depending on which source is used, dip switches 1 & 2 must be set accordingly.

This voice input can only be activated by the page port dry contacts, the VOX circuit, the C.O. port talk battery circuit or a strap across pins 5 & 6.

**CAUTION:** This input must NOT be connected directly to the telephone network.

#### B) Terminals 3 & 4 - Music/Aux (Unbalanced Input) - (4 - Positive, 3 - Negative)

Connect a music source to these terminals noting that pin 3 is negative. Reversed connection can cause oscillation. It is important that shielded cable be used to avoid any induced hum. If you are using the matching PGT-8 tuner, follow the separate instructions included with the tuner. In applications where this amplifier is used with an external Aiphone paging adaptor, this input may be used as an AUX input with 10K ohms impedance.

#### C) Terminals 5 & 6 - Music Mute

When these two terminals are shorted together, the music/aux output of the amplifier will be muted to allow a tel/mic page to be heard.

#### D) Terminal 7 - Page C/2

Connect the appropriate leads from your Aiphone intercom system to this terminal. Refer to the following wiring diagrams for more details. Set dip switches 7 & 8 according to your system.

#### E) Terminals 8 & 9 - 12/24 VDC

If an Aiphone intercom system is used in conjunction with this amplifier, connect the matching PS-1224C power supply for that intercom system to these terminals. Be sure to observe polarity.

24VDC: When using the built-in MC-A adaptor.

12VDC: When using the built-in PD-1/PD-2 adaptor.

# 3 INSTALLATION

1. Mount the amplifier on a wall or base plate capable of supporting its weight securely. Be sure no heat producing elements are nearby. Also be sure that the area behind the amplifier allows a clear path of air to flow and that the air slots at the top and bottom are not obstructed.

**IMPORTANT:** To comply with NRTL/C safety regulations, a minimum clearance of 6 inches must be maintained above the unit. (See picture at right.)

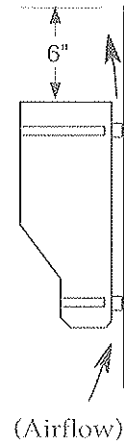
2. Loosen, but do not remove the screw at the bottom of the unit to gain access to the terminals and switches under the lower cover.

3. Lift the cover all the way up. In the fully open position you can conveniently refer to the labelling which indicates the terminal connections and dip switch settings.

4. Make all the proper connections, determined by which system is being used in conjunction with the amplifier. (As you make your connections, the small "plate" rises from the bottom of the terminal to secure the wire.)

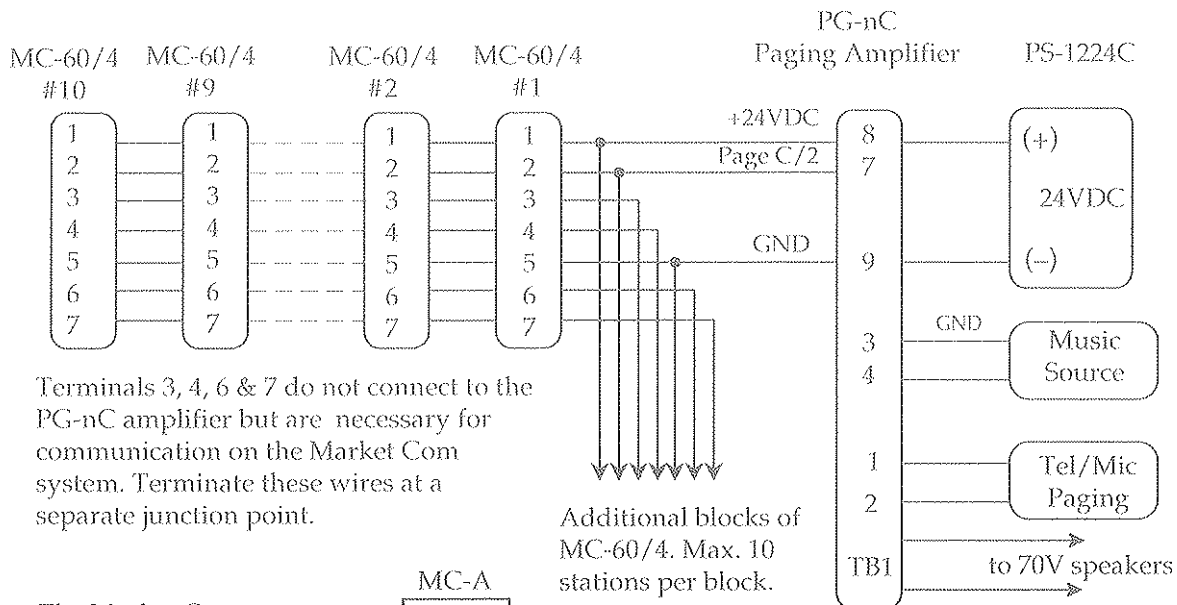
5. Connect the speaker line to the terminals labelled OUTPUT.

6. Set all appropriate switches and volume levels. (Refer to Names and Functions section.)



# 4 WIRING DIAGRAMS

## MARKET COM MC-60/4

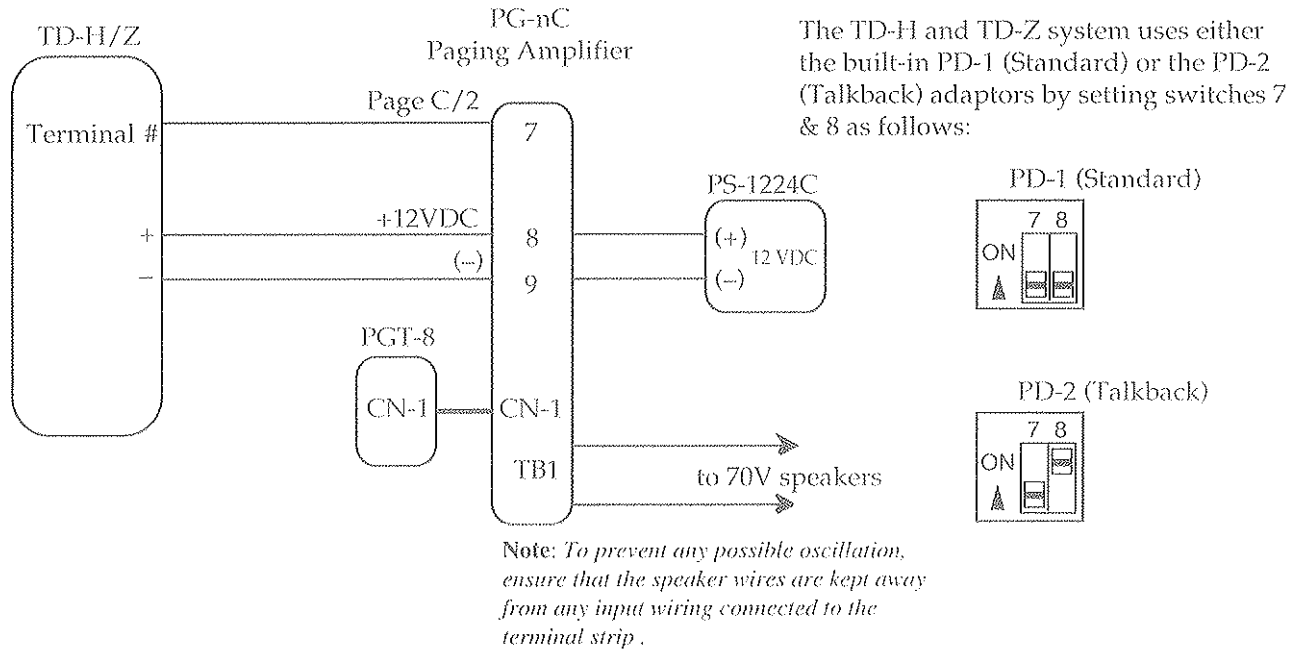


**Note:** To prevent any possible oscillation, ensure that the speaker wires are kept away from any input wiring connected to the terminal strip.

Note: When using the Tel/Mic input of a PG-C series amplifier, set dip switches 1&2 accordingly. Please refer to Names and Functions section.

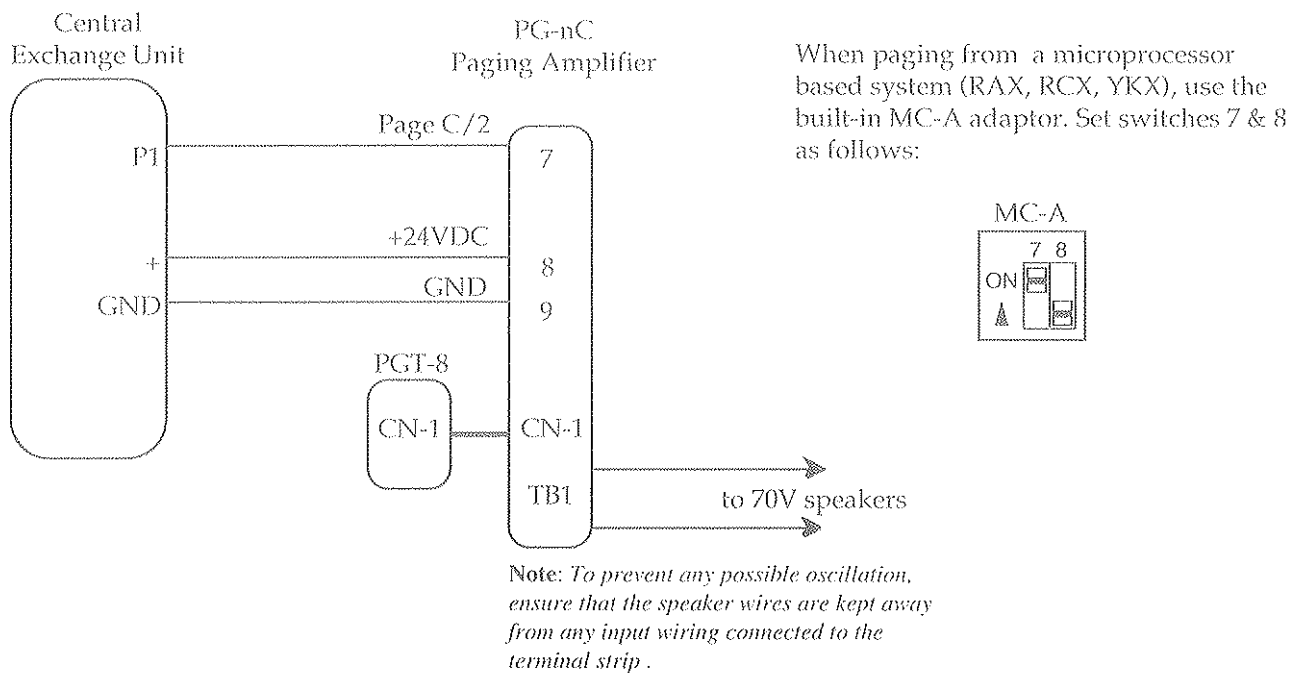
# 4 WIRING DIAGRAMS - CONT.

## TD-H/Z TELEPHONE TYPE SYSTEM



For each paging zone required, use the appropriate sized PG-C amplifier.

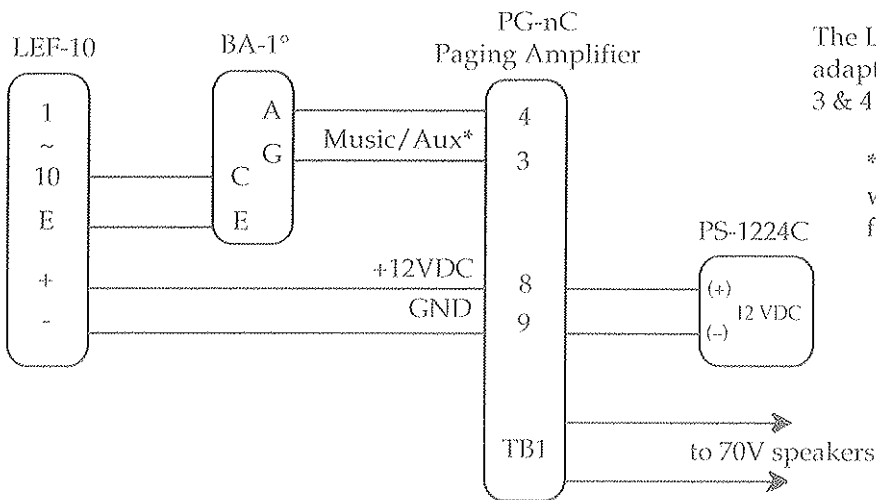
## MICROPROCESSOR SYSTEMS (RAX, RCX, YKX)



For each paging zone (up to a total of four), use the appropriate sized PG-C amplifier.

# 4 WIRING DIAGRAMS - CONT.

## LEF SYSTEM



The LEF system will use a separate paging adaptor (not built-in), connected to the 3 & 4 terminals of the PG-C series amplifier.

\* Note: Paging through the Aux input will not mute the Music if provided from PGT-8 Tuner into CN-1.

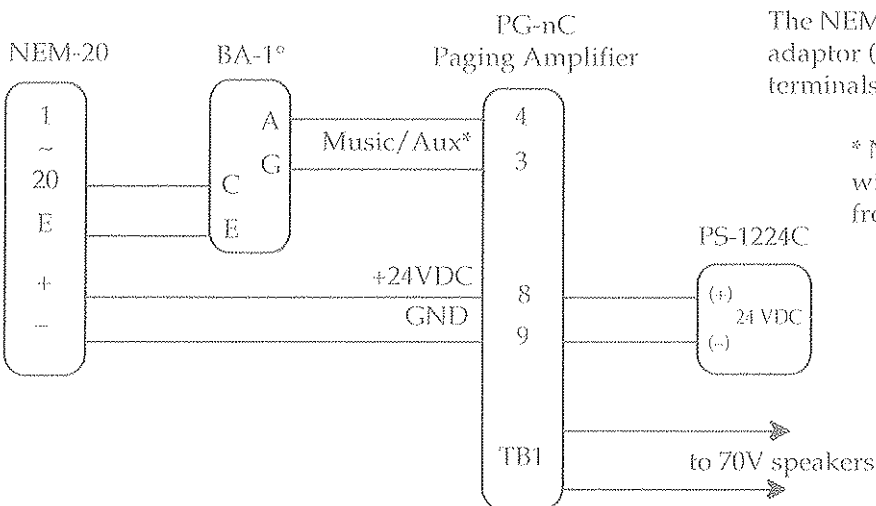
*Note: To prevent any possible oscillation, ensure that the speaker wires are kept away from any input wiring connected to the terminal strip.*

° BA-1 is a Special Order Product.

For each paging zone required, use the appropriate sized PG-C amplifier.

For further information on these products, please refer to the instructions provided with each unit.

## NEM SYSTEM



The NEM system will use a separate paging adaptor (not built-in), connected to the 3 & 4 terminals of the PG-C series amplifier.

\* Note: Paging through the Aux input will not mute the Music if provided from PGT-8 Tuner into CN-1.

*Note: To prevent any possible oscillation, ensure that the speaker wires are kept away from any input wiring connected to the terminal strip.*

° BA-1 is a Special Order Product.

For each paging zone required, use the appropriate sized PG-C amplifier.

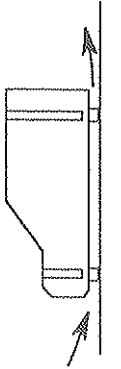
For further information on these products, please refer to the instructions provided with each unit.

### 3 INSTALLATION

1. Mount the power supply on a wall or base plate capable of supporting its weight securely. Use the template supplied with the power supply for proper placement of mounting holes. Be sure no heat producing elements are nearby. Also be sure that the area behind the power supply allows a clear path of air to flow and that the air slots at the top and bottom are not obstructed. (See picture at right.)

2. Loosen, but do not remove the screw at the bottom of the unit to gain access to the terminals and switches under the lower cover.

3. Connect output to terminals 8 (+) and 9 (-) of your PG-nC paging amplifier or to positive and negative of your Aiphone intercom system.



(Airflow)

### 4 SPECIFICATIONS

#### PS-1224C POWER SUPPLY

Output Voltage	12 VDC and 24 VDC, $\pm 7\%$
Output Current	2 Amps maximum, total (Dual output)
Output Ripple	<100 mV peak to peak
Power Source	120 VAC, $\pm 10\%$ . 60 Hz
Power Consumption	70 Watts
Fuse Rating	1.25 Amp (SloBlo)
Dimensions	W 6", H 7-1/2", D 3" (W 152, H 190, D 76 mm)
Weight	4.4 lb (2 kg)

All specifications are subject to change without notice.

### LIMITED WARRANTY

Aiphone warrants its products to be free from defects in material and workmanship under normal use and service for a period of one year after delivery to the ultimate user. At our discretion, Aiphone will repair-free-of charge or replace at no charge a product should it, upon examination, be proven defective and under warranty. Aiphone reserves unto itself the sole right to make the final decision whether there is a defect in materials and/or workmanship, and whether or not the product is within the warranty.

This warranty shall not apply to any Aiphone product which has been subject to misuse, neglect, accident, or used in violation of instructions furnished, nor extended to units which have been repaired or altered outside of the factory.

This warranty does not cover batteries or damage caused by batteries. This warranty covers bench repairs only. Any repairs must be made at the shop or place designated in writing by Aiphone. Aiphone will not be responsible for any costs incurred involving on-site calls.

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